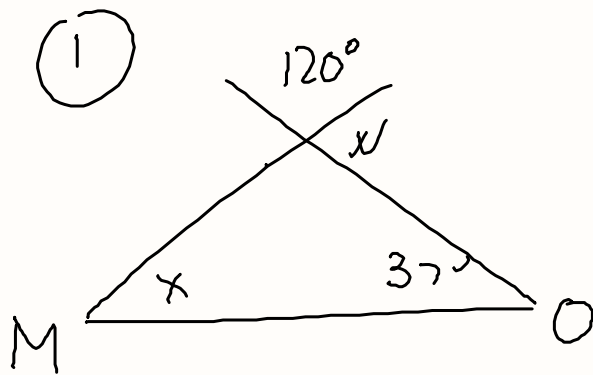


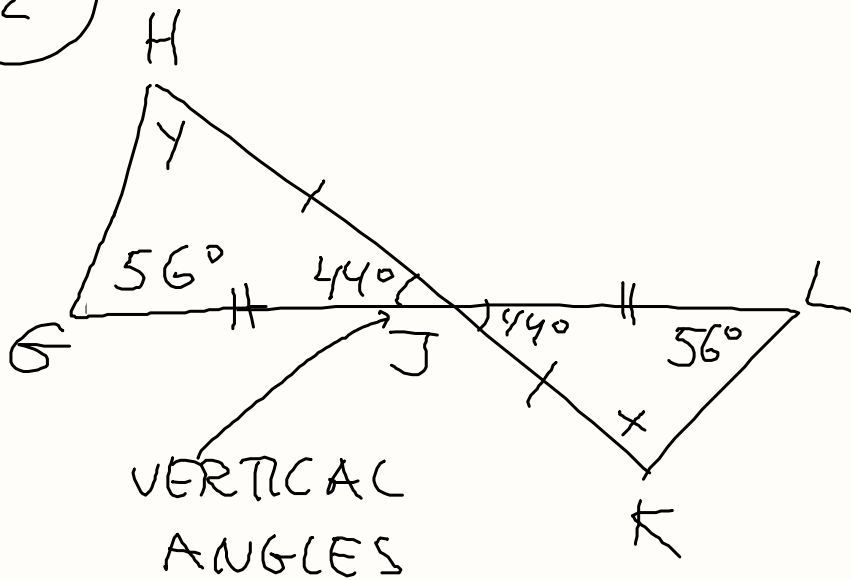
## GEOM Ch. 4 REVIEW



$$\angle MNO = 120^\circ \text{ (VERTICAL ANGLES)}$$

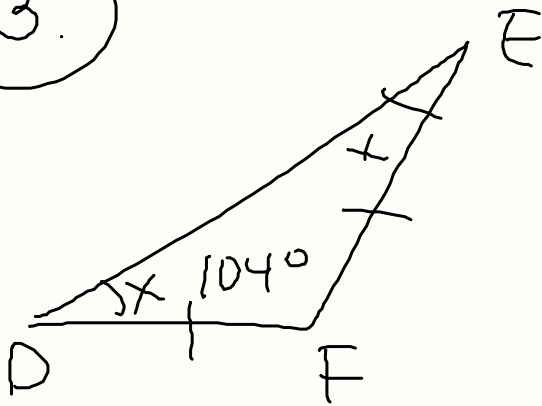
$$\begin{aligned} x &= 180^\circ - (120^\circ + 37^\circ) = \\ &= 180^\circ - 157^\circ = 23^\circ \end{aligned}$$

(2)



$$y = 180^\circ - (56^\circ + 44^\circ) = 80^\circ$$
$$x = 80^\circ$$

3.



$\triangle DFE$  - ISOSCELES

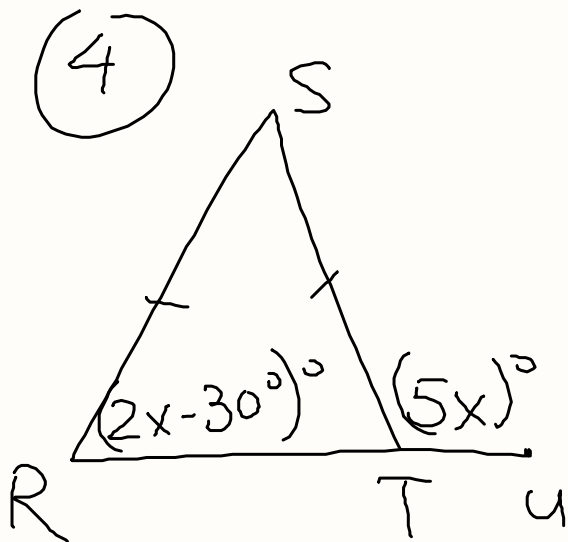
$\angle D \cong \angle E$  BASE ANGLES

$$x + x + 104^\circ = 180^\circ$$

$$2x = 180^\circ - 104^\circ$$

$$2x = 76^\circ$$

$$x = 38^\circ$$



$\triangle RST$  - ISOSCELES  
 $\therefore$  BASE ANGLES  $\angle R \cong \angle S$

$$\angle STR = 180^\circ - 5x$$

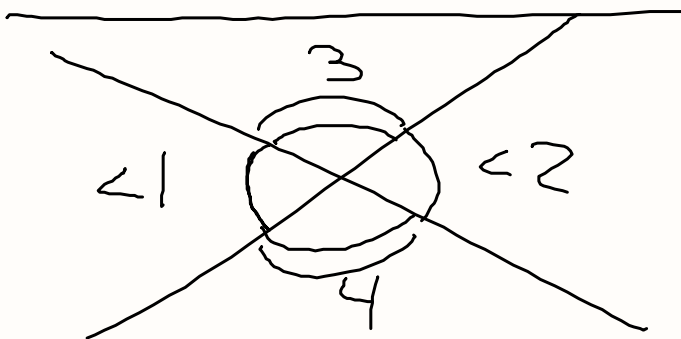
$$2x - 30^\circ = 180^\circ - 5x$$

$$+5x \quad +5x$$

$$7x = 210 \quad x = 30^\circ$$

## CONSTRUCTED RESPONSE

VERTICAL ANGLES



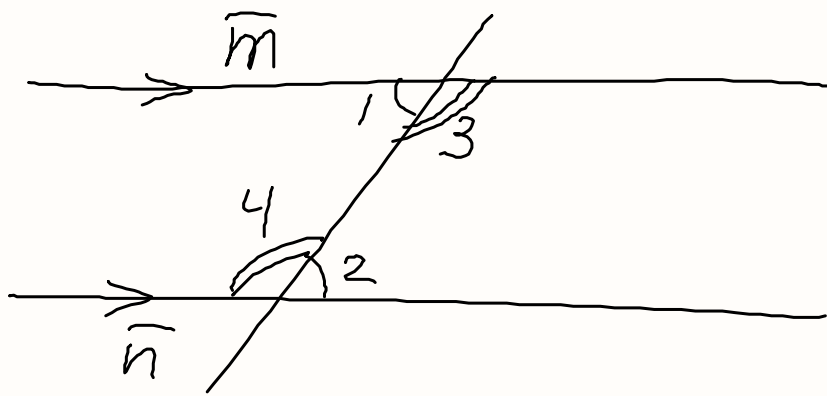
$$\angle 1 \cong \angle 2 \quad \text{VERTICAL ANGLES}$$

$$\angle 3 \cong \angle 4$$

$$\angle 1 + \angle 3 = 180^\circ, \quad \angle 2 + \angle 3 = 180^\circ$$

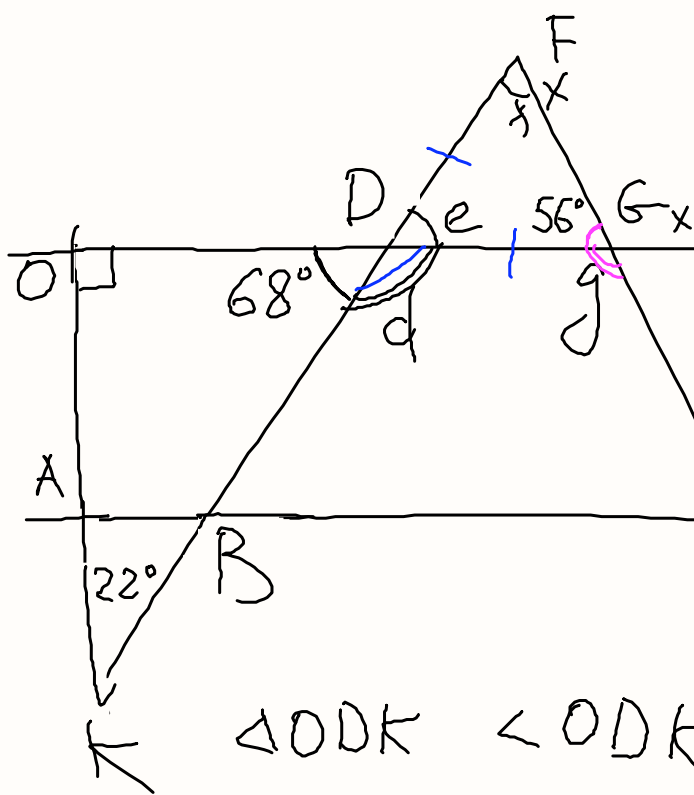
$$\angle 2 + \angle 4 = 180^\circ, \quad \angle 1 + \angle 4 = 180^\circ$$

SUPPLEMENTARY



$$\overline{m} \parallel \overline{n} \quad \angle 1 \cong \angle 2$$
$$\angle 3 \cong \angle 4$$

ALTERNATE  
INTERIOR  
ANGLES



$\triangle DFG$   
 $\angle f \cong \angle FGD$  base angles  
 $2x + 68^\circ = 180^\circ$   
 $-68^\circ \quad -68^\circ$

$$2x = 112$$

$$x = 56^\circ$$

$$g = 180^\circ - 56^\circ = 124^\circ$$

$$\angle g = \angle h = 124^\circ$$

$$\triangle ODK \quad \angle ODK = 180^\circ - (22^\circ + 90^\circ) =$$

$$= 180^\circ - 112^\circ = 68^\circ$$

$$d = 180^\circ - 68^\circ = 112^\circ$$